APPENDIX H

COPIES OF LETTERS OF REQUESTS FOR REGULATORY VALIDATION OF JURISDICTIONAL WETLAND BOUNDARIES ON ISRP ALTERNATIVE SITES

March 28, 2003

Ms. Irene Sadowski, Project Manager
CESAJ-RD-AM
U.S. Army Corps of Engineers
2460 N. Courtenay Blvd., Suite 204
Merritt Island, Florida 32953

RE: **REQUEST FOR A JURISDICTIONAL VALIDATION**
International Space Research Park at John F. Kennedy Space Center -
Preferred Alternative 1 and Alternative 2 and the SERPL Expansion

Dear Ms. Sadowski:

This letter requests a jurisdictional validation for the U.S. Army Corps of Engineers (Corps) jurisdictional determinations completed by the NASA Environmental Program Office (EPO) to support preparation of an Environmental Impact Statement (EIS) for development and operation of the International Space Research Park (ISRP) at John F. Kennedy Space Center (KSC), Florida. The EIS is being prepared in compliance with the National Environmental Policy Act of 1969 (NEPA), as amended (42 U.S.C. 4321 *et seq*.) and according to the Procedures of Implementation of NEPA for NASA (CFR Title 14 Part 1216 subpart 1216.3). The EIS will analyze three alternatives to the proposed action. Two of the three alternative actions evaluate environmental impacts of the development and operation of the ISRP at two possible development sites on KSC located in proximity to the Space Experiment Research and Processing Laboratory (SERPL) presently under construction. The third alternative, the No Action alternative, will analyze and describe the potential environmental consequences that may result if the proposed action is not conducted and present management of the land continues as currently exists. Each alternative site analysis will also include the 24± acre SERPL Expansion site, however for purposes of this validation this parcel is discussed only with Alternative 1. The locations of the alternative development sites, referred to herein as Alternative 1, Alternative 2 and SERPL Expansion, are shown on the enclosed Figure 1.

The limits of Corps "waters of the U.S." jurisdiction were determined on the selected alternative sites in accordance with the implementing regulations of the Regulatory Program set forth in 33 CFR 328.3(a) (1-7) and guidance provided in a December 18, 2002 policy letter from John R. Hall, Ph.D. Chief, Regulatory Division Jacksonville District. The jurisdictional wetland boundaries were defined using the Routine Determination method presented in the ACOE Technical Report Y-87-1, *Corps of Engineers Wetlands Delineation Manual* (January 1987), which requires positive evidence of hydrophytic vegetation, hydric soils, and wetland hydrology.

In accordance with recommendations provided in your December 4, 2003 letter following the October 24, 2002 scoping meeting conducted by NASA for the proposed ISRP, you conducted a field inspection on February 19, 2003 to review the subject jurisdictional determination completed for NASA EPO by Dynamac Corporation on the Alternative 2 site. Andrew Phillips of your office had previously reviewed the wetland delineation completed for NASA EPO by Jones Edmunds and Associates, Inc. (JEA) for Alternative 1 and SERPL Expansion site on January 28, 2002. You briefly reviewed Alternative 1 to provide your concurrence with Mr. Phillip's field determination.

To facilitate the requested wetland validation, an Existing Land Use map, showing the approximate extent of Corps wetland jurisdiction and wetland type, and a Soils map are provided for both the alternative development sites and the SERPL Expansion site in the enclosed Figures 2, 3, 4, and 5. A general land use and cover description and a brief discussion of the completed jurisdictional determination for each alternative development site and the SERPL Expansion parcel is provided below.

Alternative 1 and SERPL Expansion

Land Use and Cover

The Alternative 1 parcel is comprised of 316± acres located west of Space Commerce Way. The 24± acre SERPL Expansion parcel is located east of Space Commerce Way and adjoining the western boundary of the existing SERPL site (Figure 1). Figure 2 provides an Existing Land Use map for the Alternative 1 and the SERPL Expansion parcels. Upland community types identified on the subject parcels are Citrus Groves (FLUCCS-2210) and Pine-Mesic Oak (FLUCCS-4140). Wetland community types are Mixed Wetland Hardwoods (FLUCCS-6170), Exotic Wetlands (Brazilian pepper) (FLUCCS-6190), Wetland Forest Mixed (FLUCCS-6300), and Freshwater Marsh (FLUCCS-6410). Man-made open water cover types defined on the primary parcel are Reservoirs<10ac (FLUCCS-5340) and numerous upland-cut Drainage Ditches (FLUCCS-5100). The total acreage comprised by each land use type is provided on Figure 2.

Citrus Groves are the predominant land cover on both parcels. All the citrus groves on the SERPL Expansion parcel and about half of the groves on the Alternative 1 parcel are no longer in production.

Figure 3 provides a Soils map for the Alternative 1 and SERPL Expansion parcels. The drainage classes for the soils defined on the parcels are primarily very poorly drained sands with some areas of poorly drained sands.

Jurisdictional Determination

Jurisdictional "waters of the U.S." include each of the wetland community types identified on the Alternative 1 parcel. The Mixed Hardwood Wetland (FLUCC-6170) delineated on the SERPL Expansion parcel is an "isolated" wetland. The open water reservoirs and ditches are also considered jurisdictional waters (Figure 2). The wetlands and reservoirs are "connected" via the internal ditches and Ransom Road canal to the Indian River Lagoon, a "water of the U.S". The limits of Corps jurisdiction extends to the ordinary high water mark (OHW) within the open water reservoirs and ditches and to the boundary of each of the delineated wetlands (33 CFR 328.4 (c)). The wetland boundaries were defined in the field by JEA using pink "Wetland Delineation" flagging. Corps jurisdictional wetlands cover approximately 57.7± acres of the 316± acre Alternative 1 parcel. The isolated wetland on the SERPL Expansion site is 1.1± acres. The jurisdictional open water reservoirs and ditches on the Alternative 1 site cover about 4.8± acres and 7.1± acres, respectively.

Alternative 2

Land Use and Cover

The 330.5± acre Alternative 2 site is located east of S.R. 3, approximately one mile south of Space Commerce Way at Tel-4 Road (Figure 1). The site is generally characterized as a scrubby pine flatwoods matrix intermixed with linear oak scrub ridges and numerous freshwater wetland swales oriented north-to-south. Figure 4 provides an Existing Land Use map for Alternative 2. The majority of the Alternative 2 site is composed of primarily undisturbed natural communities. Land disturbances on the site, as discussed below, are limited to about 27 acres of the total 330± acre site.

Upland community types classified on Alternative 2 are Scrubby Pine Flatwoods (FLUCCS-4111), Oak Scrub (FLUCCS-4210), and Disturbed Scrubby Flatwoods (7400). Wetland community types are Mixed Wetland Hardwoods (FLUUCS-6170), Exotic Wetlands (Brazilian pepper) (FLUCCS-6190) and Freshwater Marsh (FLUCCS-6410). Melaleuca does occur on the site as sparse populations intermixed primarily within the Mixed Wetland Hardwoods wetland areas.

Two man-made open water features were identified on Alternative 2; a shallow Reservoir <10 acres (borrow area) (FLUCCS-5340) located along the northern boundary colonized by cattail (*Typha* spp.) and an upland-cut Drainage Ditch (FLUCCS-5100) along the southern boundary. Additional man-made features within the Alternative 2 boundaries are a Government Building (FLUCCS-1750), the Tel-4 right-of way (Government Maintained Road (FLUCCS-8144)), and two dirt land management roads (Roads and Highways (Graded and Drained (FLUCCS-8145)). The total acreage comprised by each land use type is provided on Figure 4.

A Soils map for Alternative 2 is provided in Figure 5. The drainage classes for the soils identified on the site include the predominant poorly drained sands of the flatwoods, the moderately well drained sands of the low ridges and the very poorly drained sands of the wetland swales.

Jurisdictional Determination

The limits of wetland jurisdiction on the Alternative 2 Site have been reduced based on the January 9, 2001 U.S. Supreme Court ruling on Solid Waste Agency of Northern Cook County (SWANCC) v. U.S. Army Corps of Engineers. This ruling determined that the Federal government was not authorized to assert jurisdiction on isolated, non-navigable, intrastate waters based solely on their use by migratory birds (Dec. 18, 2001 Jacksonville District policy letter). The Corps only has the authority to regulate wetland areas determined to be “connected” or “adjacent”. Based on the implementing regulations and Jacksonville District policy letter cited above, an “adjacent wetland” must be within 200 feet of the ordinary high water mark (OHW) of open waters (defined as any flowing or standing surface water, including ditches) of another water of the U.S. (wetlands can not be adjacent to other wetlands).

Application of this jurisdictional guidance determined that the westernmost freshwater wetland swale that extends the length of the site is connected to the open water of the Banana River Lagoon via the ditch located along the southern project boundary. A total of four wetlands were determined to be “adjacent wetlands” due to their location within 200 feet of the open water ditch. The wetland boundaries were determined using aerial photo-interpretation with extensive ground-truthing. Corps jurisdictional wetlands cover approximately 46.0± acres of the 330± acre

site. The southern ditch over which the Corps has jurisdiction comprises about 1.3± acres.

We look forward to receiving validation of the Corps jurisdiction determination for the ISRP Alternative 1, including the SERPL Expansion site, as shown on Figure 2 and the ISRP Alternative 2 as shown on Figure 4. Two (2) additional copies of each enclosed figure are provided for your use.

If you have any questions regarding the information presented herein, please do not hesitate to contact me at (321) 867-8456. Thank you for your cooperation and prompt consideration of this request in support of ISRP project.

Sincerely,

Mario Busacca
NASA Environmental Program Office

Enclosures: Figures 1, 2, 3,4, and 5 (3 copies each)

cc: Jim Melton, Dynamac Corporation
Vickie Larson, Dynamac Corporation

March 28, 2003

Ms. Michelle Reiber, Supv. Regulatory Scientist
St. Johns River Water Management District
525 Community College Parkway
Palm Bay, FL 32909

RE: **INFORMAL WETLAND BOUNDARY DETERMINATION**
International Space Research Park at John F. Kennedy Space Center -
Preferred Alternative 1, Alternative 2 and SERPL Expansion

Dear Ms. Reiber:

This letter follows the March 6, 2002 pre-application field meeting with NASA Environmental Program Office (EPO) and Dynamac Corporation at the above referenced Alternative 2 site. The purpose of this field meeting was to obtain an informal wetland boundary determination in accordance with the State of Florida's (State) *Delineation of the Landward Extent of Wetlands and Surface Waters* (Chapter 62-340, Florida Administrative Code (F.A.C.)) to support preparation of an Environmental Impact Statement (EIS) for development and operation of the International Space Research Park (ISRP) at John F. Kennedy Space Center (KSC), Florida. You conducted an informal wetland boundary determination for Alternative 1, including the SERPL Expansion parcel, on January 28, 2002. The Alternative 1 field review was completed at the request of NASA EPO and Jones Edmunds and Associates, Inc. (JEA). It is understood that these pre-application reviews were conducted for conceptual site planning purposes only and are not legally binding on either the St. Johns River Water Management District (District) or NASA.

The EIS is being prepared in compliance with the National Environmental Policy Act of 1969 (NEPA), as amended (42 U.S.C. 4321 *et seq*.) and according to the Procedures of Implementation of NEPA for NASA (CFR Title 14 Part 1216 subpart 1216.3). The EIS will analyze three alternatives to the proposed action. Two of the three alternative actions evaluate environmental impacts of the development and operation of the ISRP at two possible development sites on KSC located in proximity to the Space Experiment Research and Processing Laboratory (SERPL) presently under construction. The third alternative, the No Action alternative, will analyze and describe the potential environmental consequences that may result if the proposed action is not conducted and present management of the land continues as currently exists. Each alternative site analysis will also include the 24± acre SERPL Expansion site, however for purposes of this informal wetland boundary determination this parcel is discussed only with Alternative 1. The locations of the alternative development sites, referred to herein as Alternative 1, Alternative 2 and SERPL Expansion, are shown on the enclosed Figure 1.

To facilitate your review of this request for an informal wetland boundary determination, an Existing Land Use map, delineating the approximate landward extent of District wetland jurisdiction and wetland type, and a Soils map are provided for both the alternative development sites and the SERPL Expansion site in the enclosed Figures 2, 3, 4, and 5. A general land use and land cover description and a brief discussion of the wetland and surface water delineation completed for each of the subject sites are provided below.

Alternative 1 and SERPL Expansion

Land Use and Cover

The Alternative 1 parcel is comprised of 316± acres located west of Space Commerce Way. The 24± acre SERPL Expansion parcel is located east of Space Commerce Way and adjoining the western boundary of the existing SERPL site (Figure 1). Figure 2 provides an Existing Land Use map for the Alternative 1 and SERPL Expansion parcels. Upland community types identified on the subject parcels are Citrus Groves (FLUCCS-2210) and Pine-Mesic Oak (FLUCCS-4140). Wetland community types are Mixed Wetland Hardwoods (FLUCCS-6170), Exotic Wetlands (Brazilian pepper) (FLUCCS-6190), Wetland Forest Mixed (FLUCCS-6300), and Freshwater Marsh (FLUCCS-6410). Man-made open water cover types defined on the primary parcel are Reservoirs<10ac (FLUCCS-5340) and numerous upland-cut Drainage Ditches (FLUCCS-5100). The total acreage comprised by each land use type is provided on Figure 2.

Citrus Groves are the predominant land cover on both parcels. All the citrus groves on the SERPL Expansion site and about half of the groves on the primary parcel are no longer in production.

Figure 3 provides a Soils map for the Alternative 1 and SERPL Expansion parcels. The drainage classes for the soil mapping units defined on the parcels are primarily very poorly drained sands with some areas of poorly drained sands.

Landward Extent of Wetlands and Surface Waters

The landward extent of wetlands and surface waters delineated on the Alternative 1 and SERPL Expansion parcels is provided on Figure 2. It includes each of the wetland community types, the open water borrow areas and upland cut ditches. The wetland boundaries were defined in the field by JEA using pink “Wetland Delineation” flagging. District jurisdictional wetlands cover approximately 57.7± acres of the 316± acre Alternative 1 parcel. The isolated wetland on the SERPL Expansion site is 1.1± acres. Surface waters, comprised of the open water reservoir areas and ditches, cover about 4.8± acres and 7.1± acres, respectively. The landward extent of surface waters of the State is defined by the top of bank for the subject artificial water bodies (Chapter 62-340.600 F.A.C.).

Alternative 2

Land Use and Cover

The 330± acre Alternative 2 site is located east of S.R. 3, approximately one mile south of Space Commerce Way at Tel-4 Road (Figure 1). The site is generally characterized as a scrubby pine flatwoods matrix intermixed with linear oak scrub ridges and numerous freshwater wetland swales oriented north-to-south. Figure 4 provides an Existing Land Use map for Alternative 2. The majority of the Alternative 2 site is composed of primarily undisturbed natural communities. Land disturbances on the site, as discussed below, are limited to about 27 acres of the total 330± acre site.

Upland community types classified on Alternative 2 are Scrubby Pine Flatwoods (FLUCCS-4111), Oak Scrub (FLUCCS-4210), and Disturbed Scrubby Flatwoods (7400). Wetland community types are Freshwater Marsh (FLUCCS-6410), Mixed Wetland Hardwoods (FLUUCS-6170), and Exotic Wetlands (Brazilian pepper) (FLUCCS-6190). Melaleuca does occur on the site as sparse populations intermixed primarily within the Mixed Wetland Hardwoods wetland areas.

Two man-made surface water features were identified on Alternative 2; a shallow Reservoirs<10ac (borrow area) (FLUCCS-5340) located along the northern boundary colonized by cattail (*Typha* spp.) and an upland-cut Drainage Ditch (FLUCCS-5100) along the southern boundary. Additional man-made features within the Alternative 2 boundaries are a Government Building (FLUCCS-1750), the Tel-4 right-of way (Government Maintained Road (FLUCCS-8144)), and two dirt land management roads (Roads and Highways (Graded and Drained (FLUCCS-8145)). The total acreage comprised by each land use type is provided on Figure 4.

A Soils map for Alternative 2 is provided in Figure 5. The drainage classes for the soils identified on the site include the predominant poorly drained sands of the flatwoods, the moderately well drained sands of the low ridges and the very poorly drained sands of the wetland swales.

Landward Extent of Wetlands and Surface Waters

The landward extent of wetlands and surface waters delineated on the Alternative 2 site is provided on Figure 4. It includes each of the wetland community types and the surface water areas. The wetland and surface water boundaries were determined using aerial photo-interpretation with extensive ground-truthing. Wetlands cover 66.7± acres of the 330± acre Alternative 2 site. Surface waters encompass a total of 5.4± acres.

A letter of concurrence with the information presented above and on the attached figures is requested. If the results of this informal wetland determination have been misinterpreted or are incorrectly presented, please advise immediately. Two (2) additional copies of each enclosed figure are provided for your use.

Please do not hesitate to contact me at (321) 867-8456 with any questions regarding the information presented herein. Thank you for your cooperation and prompt consideration of this request in support of ISRP project.

Sincerely,

Mario Busacca
NASA Environmental Program Office

Enclosures: Figures 1, 2, 3, 4, and 5 (3 copies each)

cc: Jim Melton, Dynamac Corporation
Vickie Larson, Dynamac Corporation